



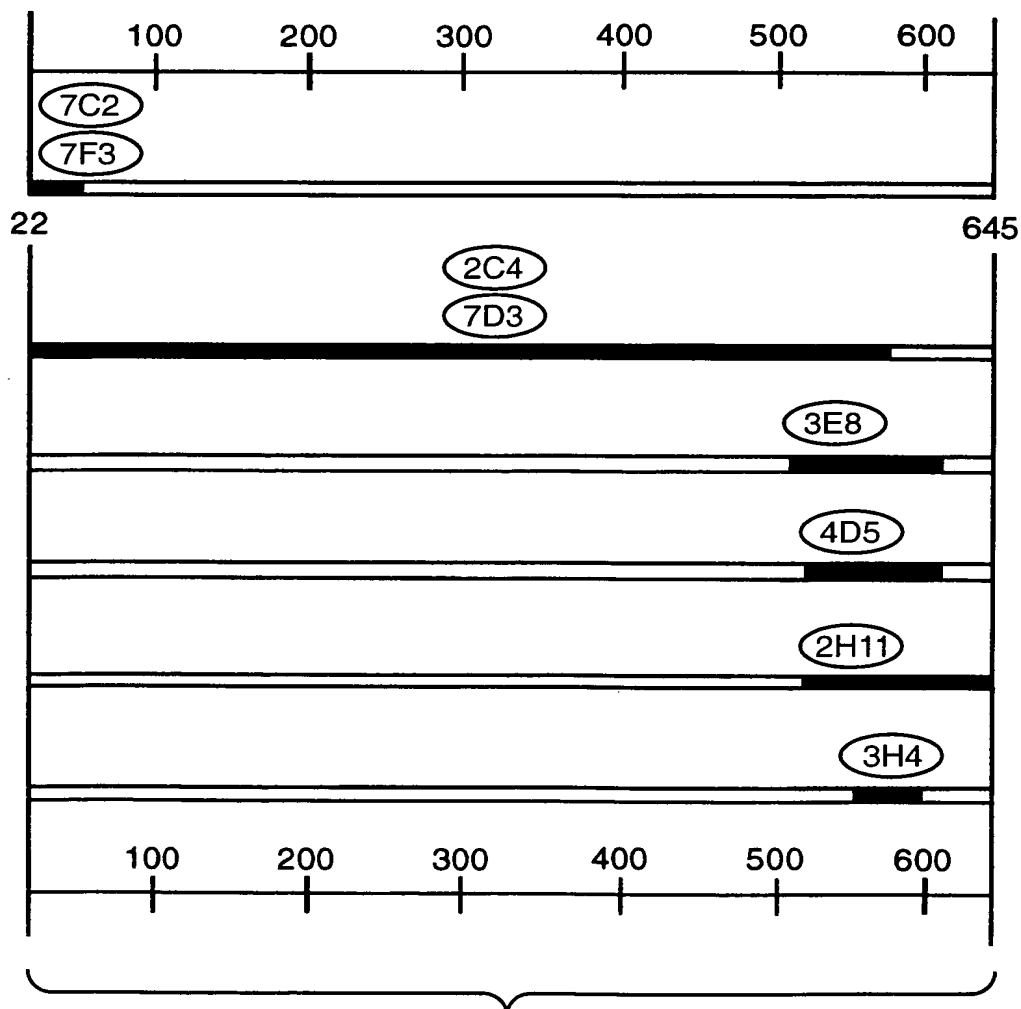
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1 MELAALCRWG LLLALLPPGA ASTQVCTGTD MKLRLPASPE THLDMRHLV QGCQVQGNL ELTYLPTNAS LSFLODIQEV QGYVLIAHQ VRQVPLQRLR
101 IVRGTOQLFED NYALAVLDNG DPLNNTTPVT GASPGGLREL QLRSLTEILK GGVLIQRNPQ LCYQDTILWK DIFHKNNQLA LTLIDTNRSR ACHPCSPMCK
201 GSRWGESSE DCOSLTRTVC AGGCARCKGP LPTDCCHEQC AAGCTGPKHS DCLACLHFNH SGICELHCPA LVTYNTDTFE SMPNPEGRYT FGASCVTACP
301 YNYLSTDVGS CTLVCPHLNQ EVTAEDGTOR CEKCSKPCAR VCYGLGMEHL REVRAVTSAN IQEFAGCKKI FGSLAFLPES FDGDPASNTA PLQPEQLQVF
401 ETLEEITGYL YISAWPDSL P DLVVFQNLQV IRGRILHNGA YSLTLQGLGI SWGLRSLRE LGSGLALIIH NTHLCFVHTV PWDQLFRNPH QALLHTANRP
501 EDECVGEGLA CHOLCARGHC WPGPTQCVN CSQFLRGQEC VEECRVLOGL PREYVNAHRC LPCHPECQPQ NGSVTCFGPE ADQCVACAHY KDPPFCVARC
601 PSGVKPDLSY MPIWKFPDEE GACQPCPINC THSCVDLDDK GCPAE (SEQ ID NO: 13)

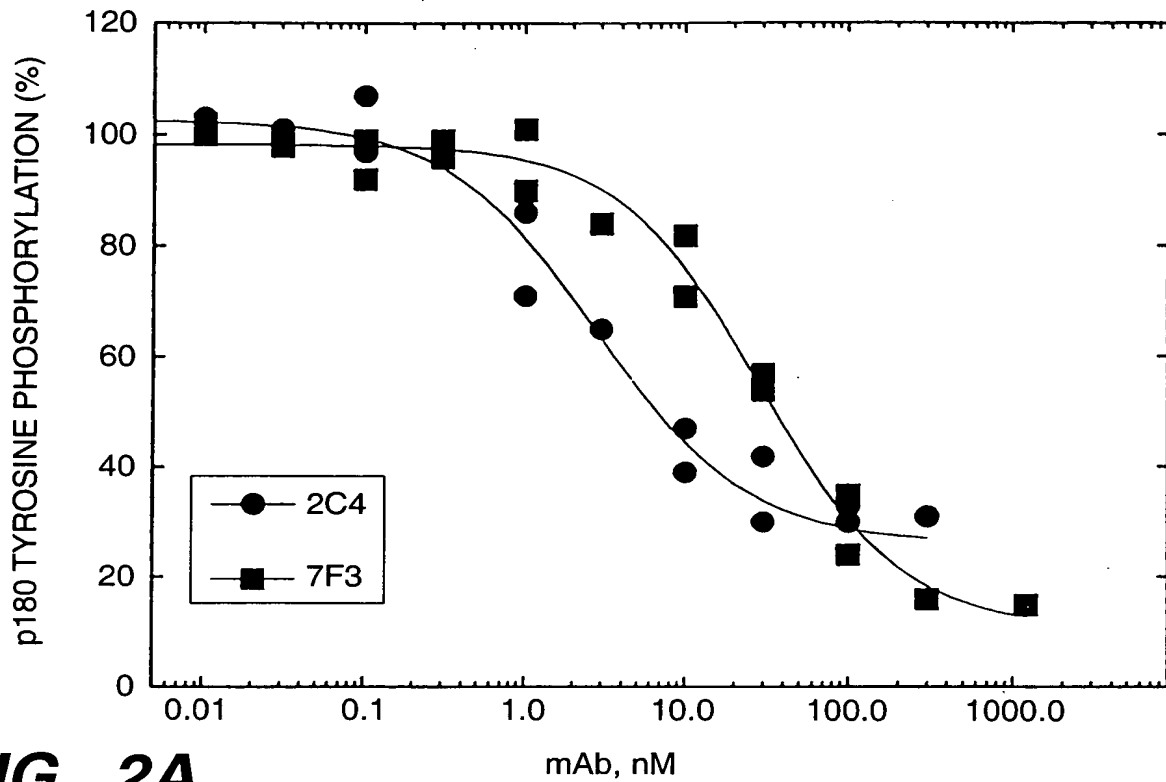
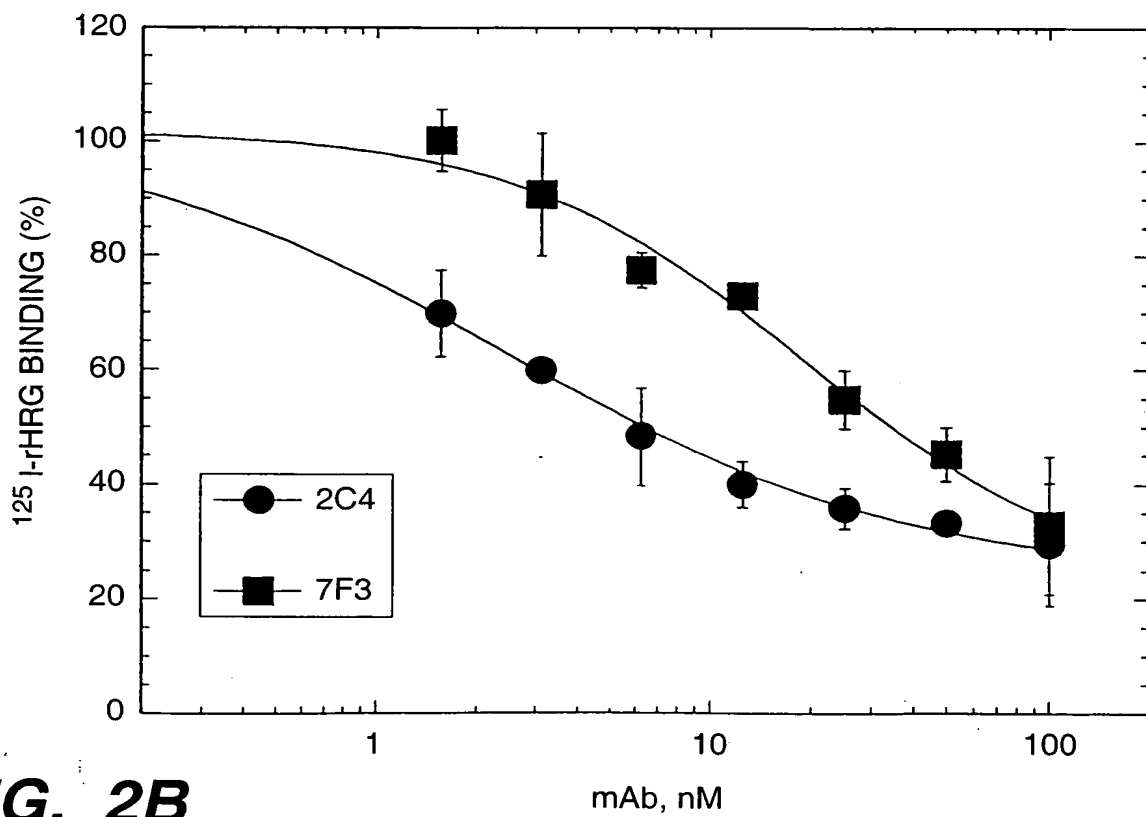
FIG._1A

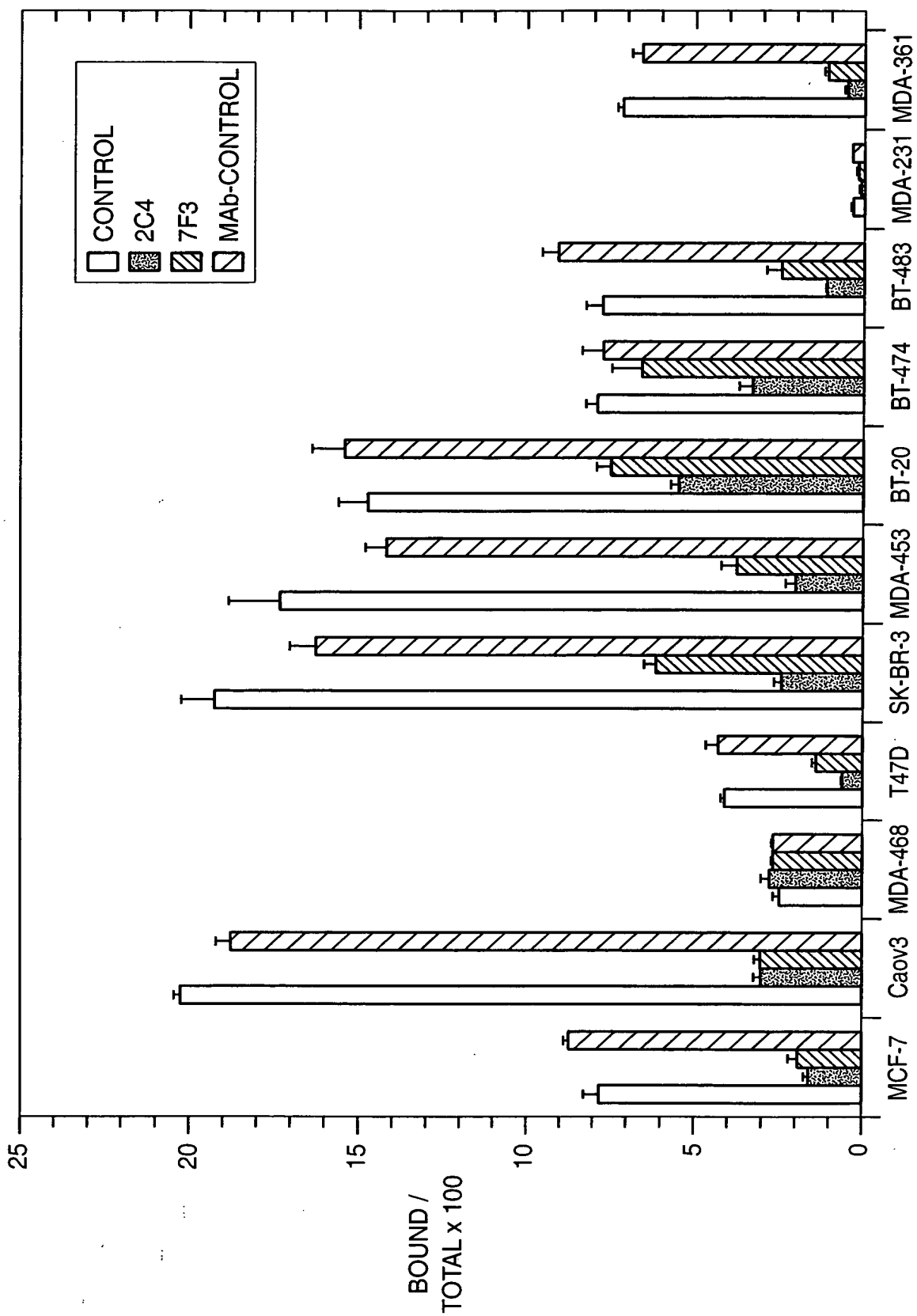
+

7C2	aa	22-53	(31 RESIDUES)
7F3	aa	22-53	(31 RESIDUES)
2C4	aa	22-584	(562 RESIDUES)
7D3	aa	22-584	(562 RESIDUES)
3E8	aa	512-625	(113 RESIDUES)
4D5	aa	529-625	(96 RESIDUES)
2H11	aa	529-645	(116 RESIDUES)
3H4	aa	541-599	(58 RESIDUES)

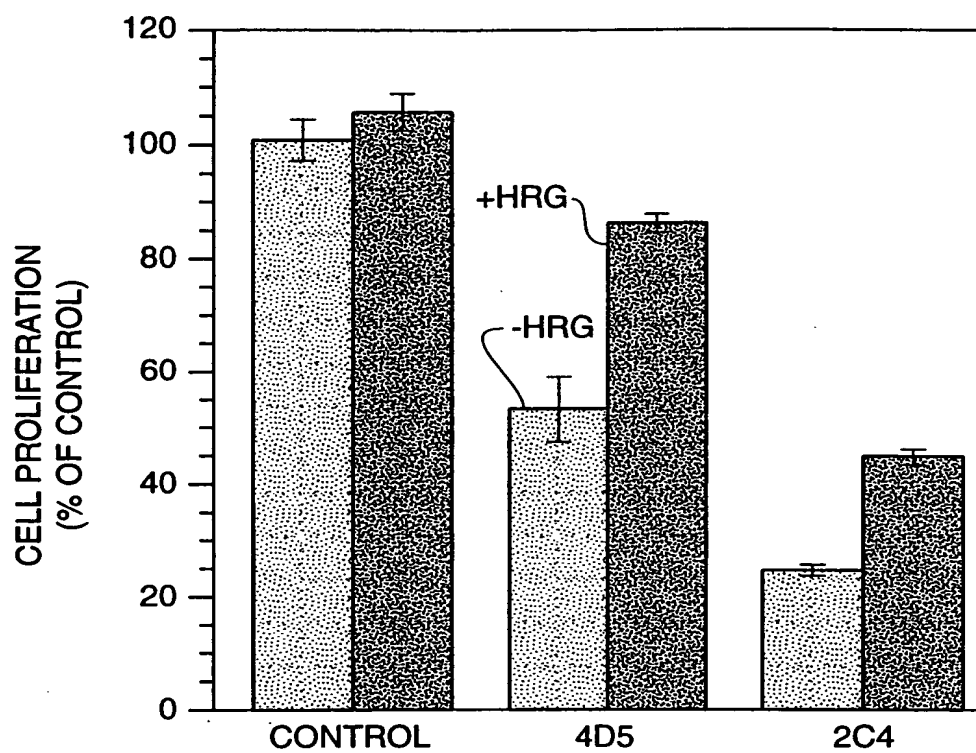
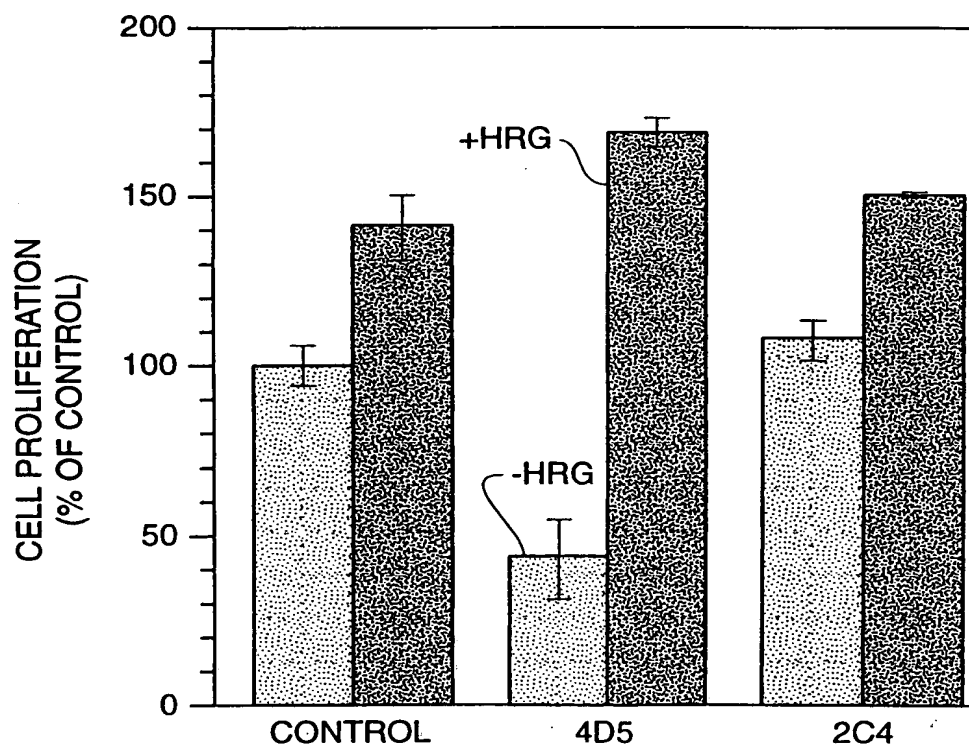
**FIG. 1B**

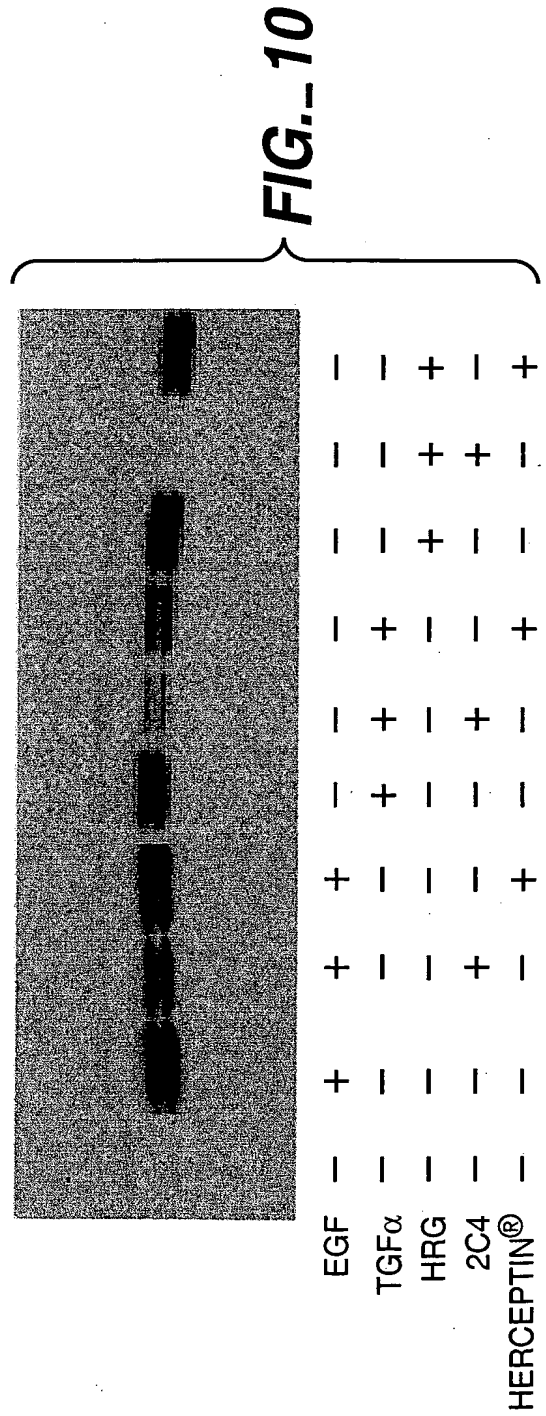
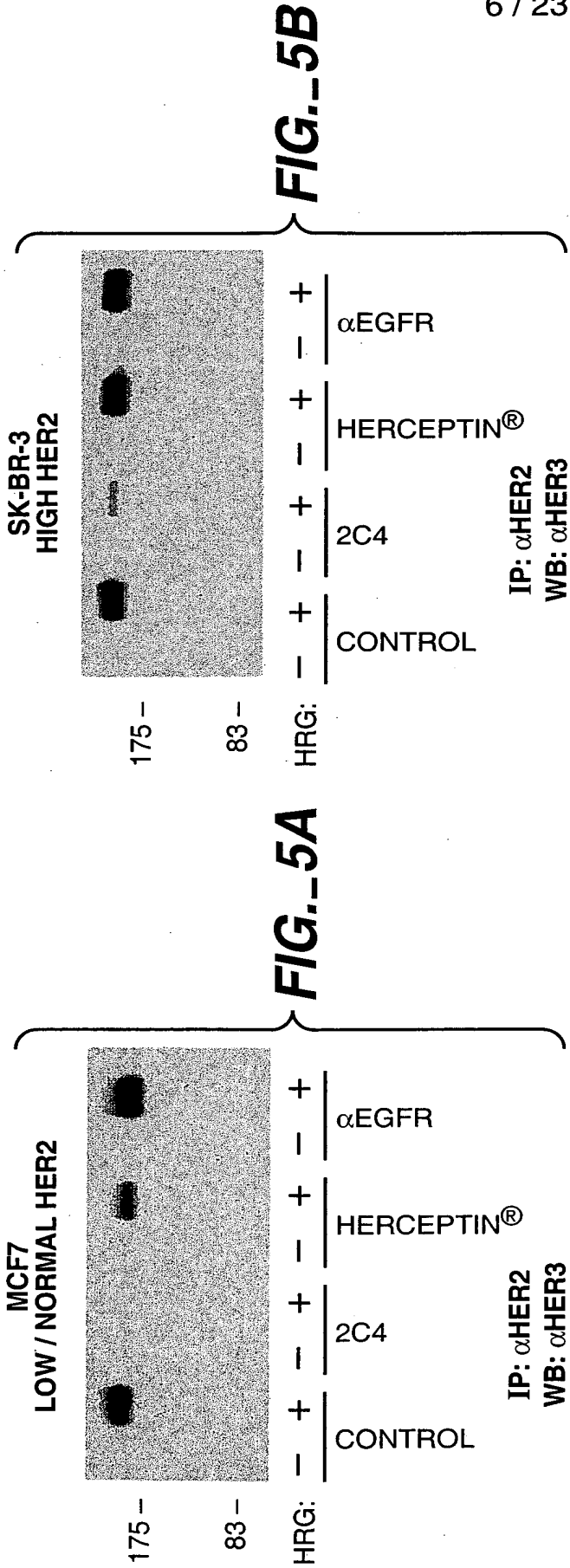
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**FIG. 2A****FIG. 2B**

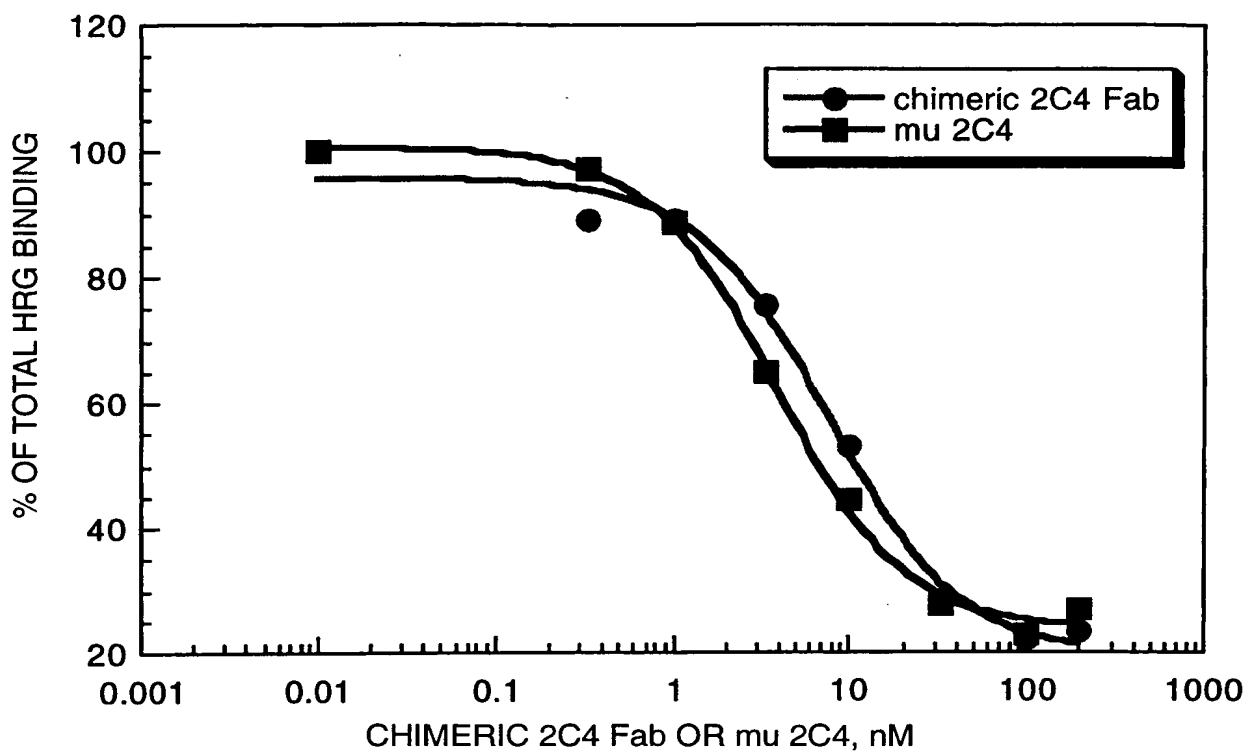
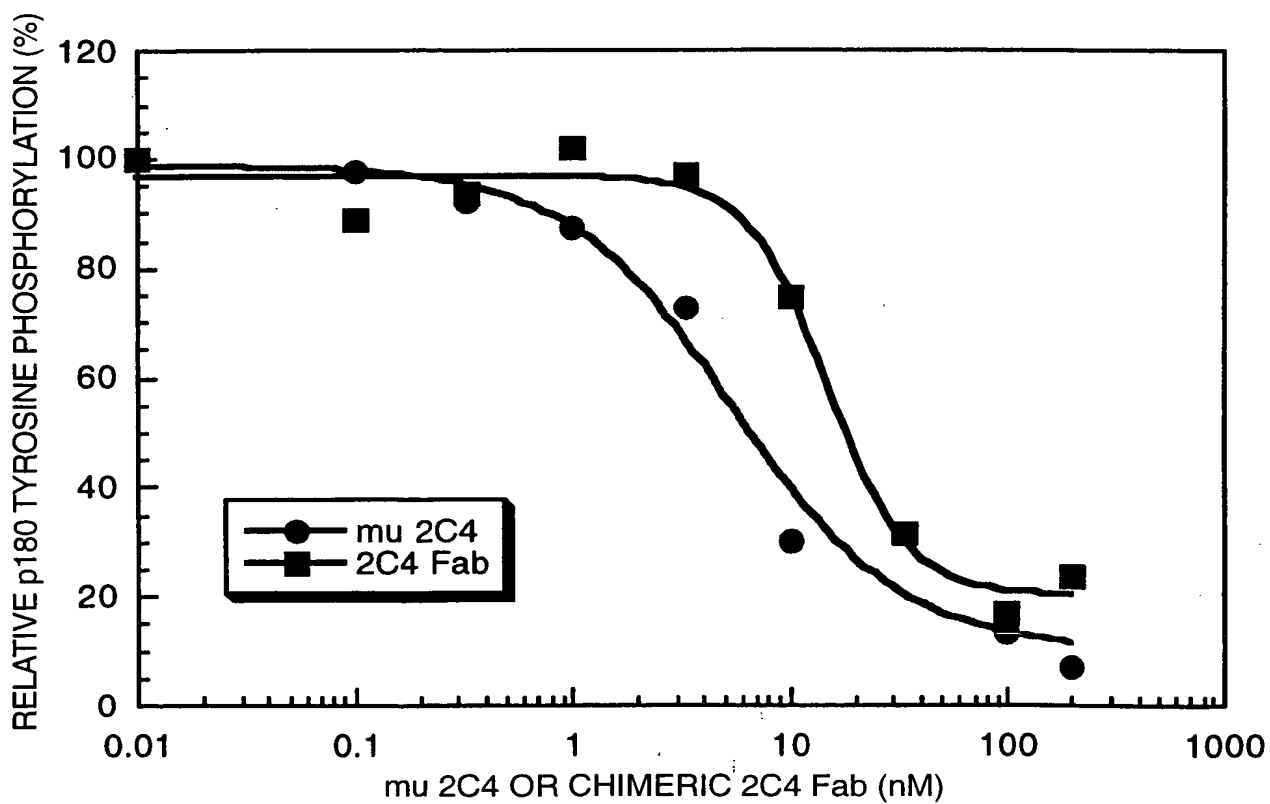
**FIG. 3**

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**FIG. 4A****FIG. 4B**



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**FIG. 6A****FIG. 6B**

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VARIABLE LIGHT

	10	20	30	40
2C4	DTVMTQSHKIMSTSVGDRVSITC	[KASQDV SIGVA]	WYQQR	P
	** **** *	*		*
574	DIQMTQSPSSLSASVGDRVTITC	[KASQDV SIGVA]	WYQQK	P
		* ** ***		
hum κI	DIQMTQSPSSLSASVGDRVTITC	[RASQSI SNYLA]	WYQQK	P

	50	60	70	80
2C4	GQSPKLLIY [SASYRYT]	GVPDRFTGSGSGTDFTFTISSVQA		
	** *	*	*	*
574	GKAPKLLIY [SASYRYT]	GVPSRFSGSGSGTDFTLTISLQ		P
	* *****			
hum κI	GKAPKLLIY [AASSLES]	GVPSRFSGSGSGTDFTLTISLQ		P

	90	100	
2C4	EDLAVYYC [QQYIYPYT]	FGGGTKLEIK	(SEQ ID NO:1)
	* *	* *	
574	EDFATYYC [QQYIYPYT]	FGQGTKVEIK	(SEQ ID NO:3)
	*** *		
hum κI	EDFATYYC [QQYNL PWT]	FGQGTKVEIK	(SEQ ID NO:5)

FIG._7A

VARIABLE HEAVY

	10	20	30	40
2C4	EVQLQQSGPELVKPGTSVKISCKAS	[GFTFTDYTMD]	WVKQS	
	** ** *	* ** *		*
574	EVQLVESGGGLVQPGGSLRLSCAAS	[GFTFTDYTMD]	WVRQA	
		** * *		
hum III	EVQLVESGGGLVQPGGSLRLSCAAS	[GFTFSSYAMS]	WVRQA	

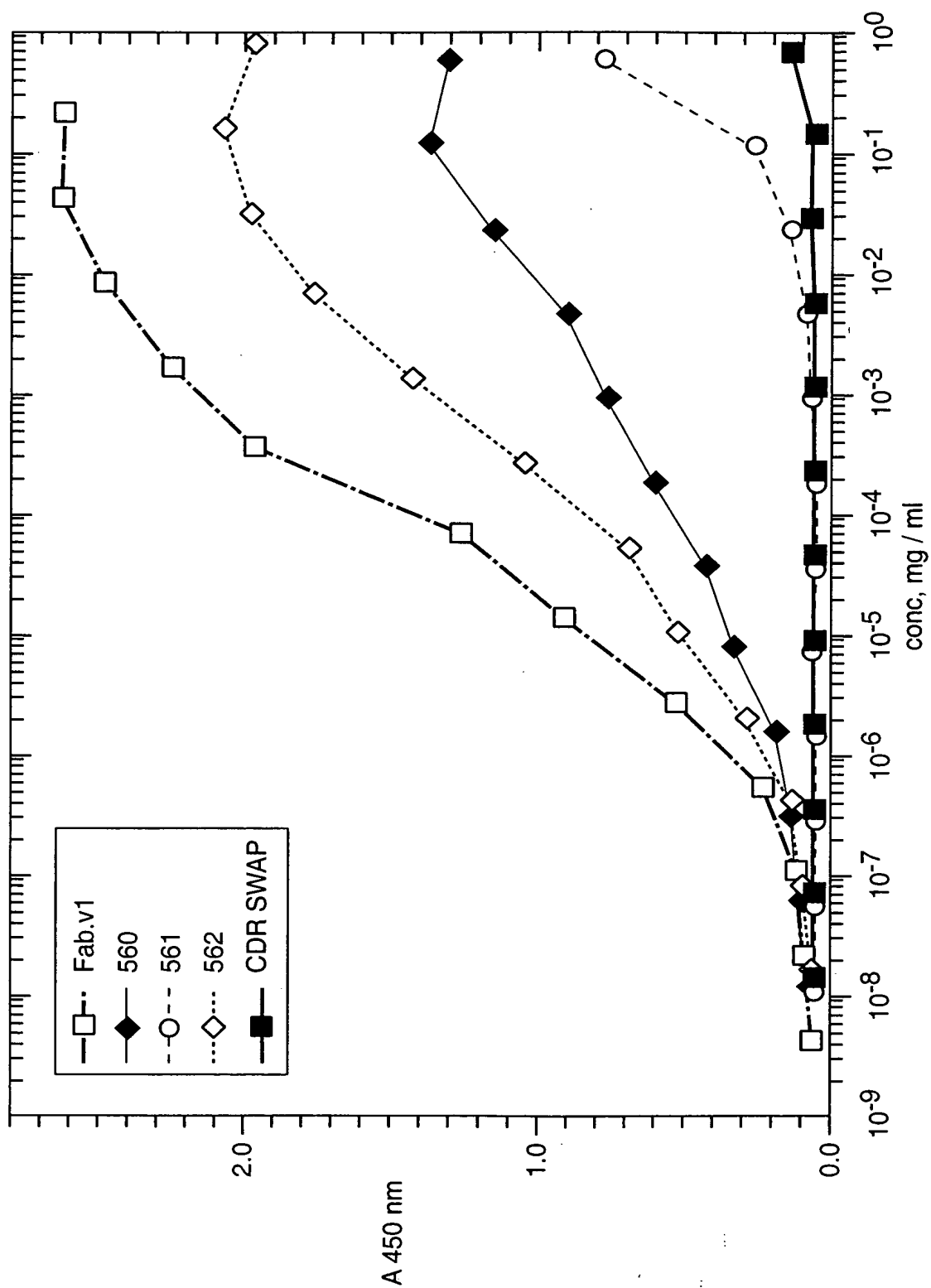
	50 a	60	70	80
2C4	HGKSLEWIG [DVNPNSGGSIYNQRFKG]	KASLTVD RSSRIVYM		
	* * **		*** *	**** *
574	PGKGLEWVA [DVNPNSGGSIYNQRFKG]	RFTLSVDRSKNTLYL		
	***** ** *		*	*
hum III	PGKGLEWVA [VISGDGGSTYYADSVKG]	RFTISRDN SKNTLYL		

	abc	90	100ab	110	
2C4	ELRSLTFEDTAVYYCAR	[NLGPSFYFDY]	WGQGTTLTVSS	(SEQ ID NO:2)	
	*** **		**		
574	QMNSLRAEDTAVYYCAR	[NLGPSFYFDY]	WGQGTTLTVSS	(SEQ ID NO:4)	

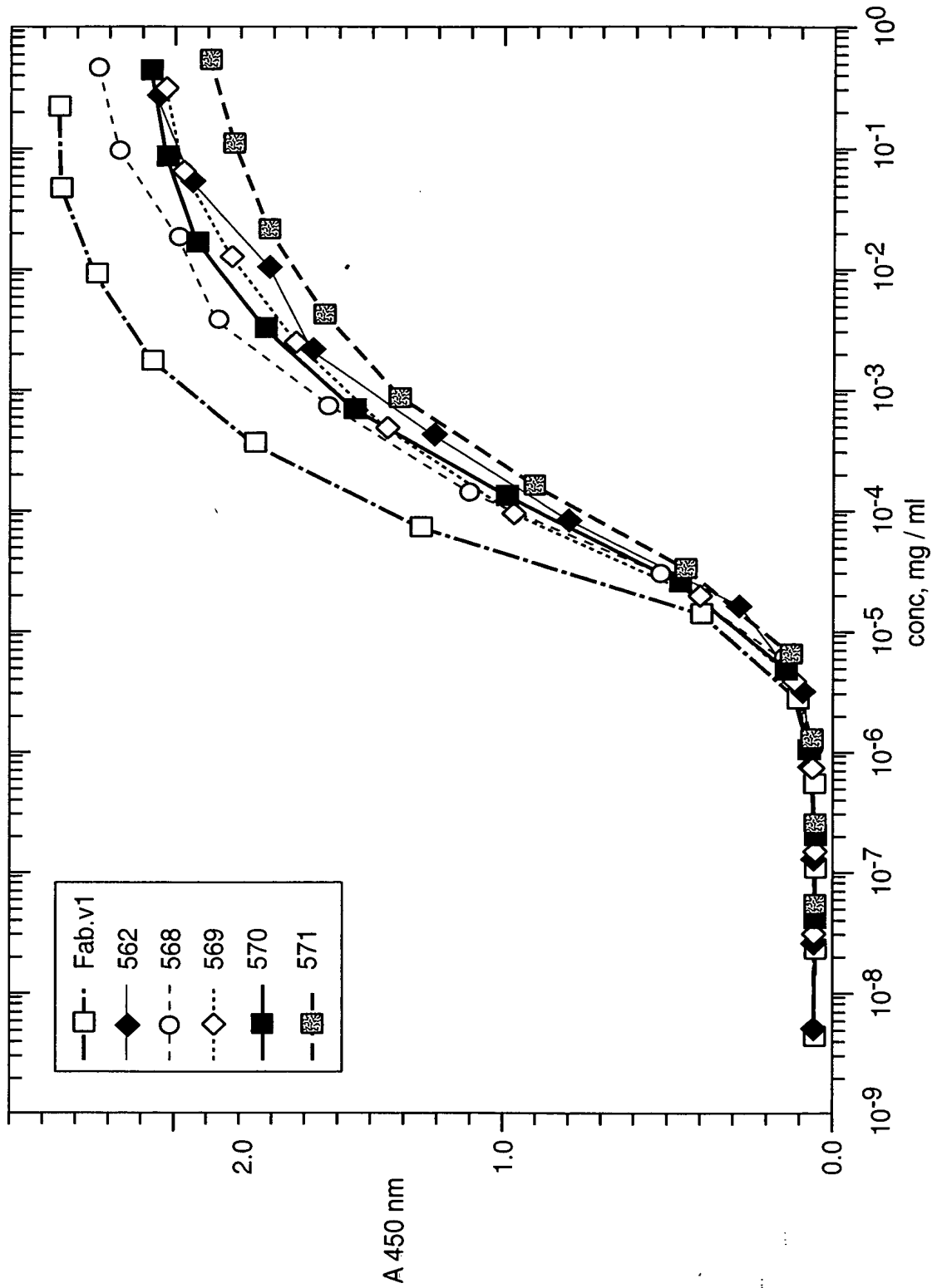
hum III	QMNSLRAEDTAVYYCAR	[GRVGYSLYDY]	WGQGTTLTVSS	(SEQ ID NO:6)	

FIG._7B

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**FIG._8A**

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**FIG._8B**

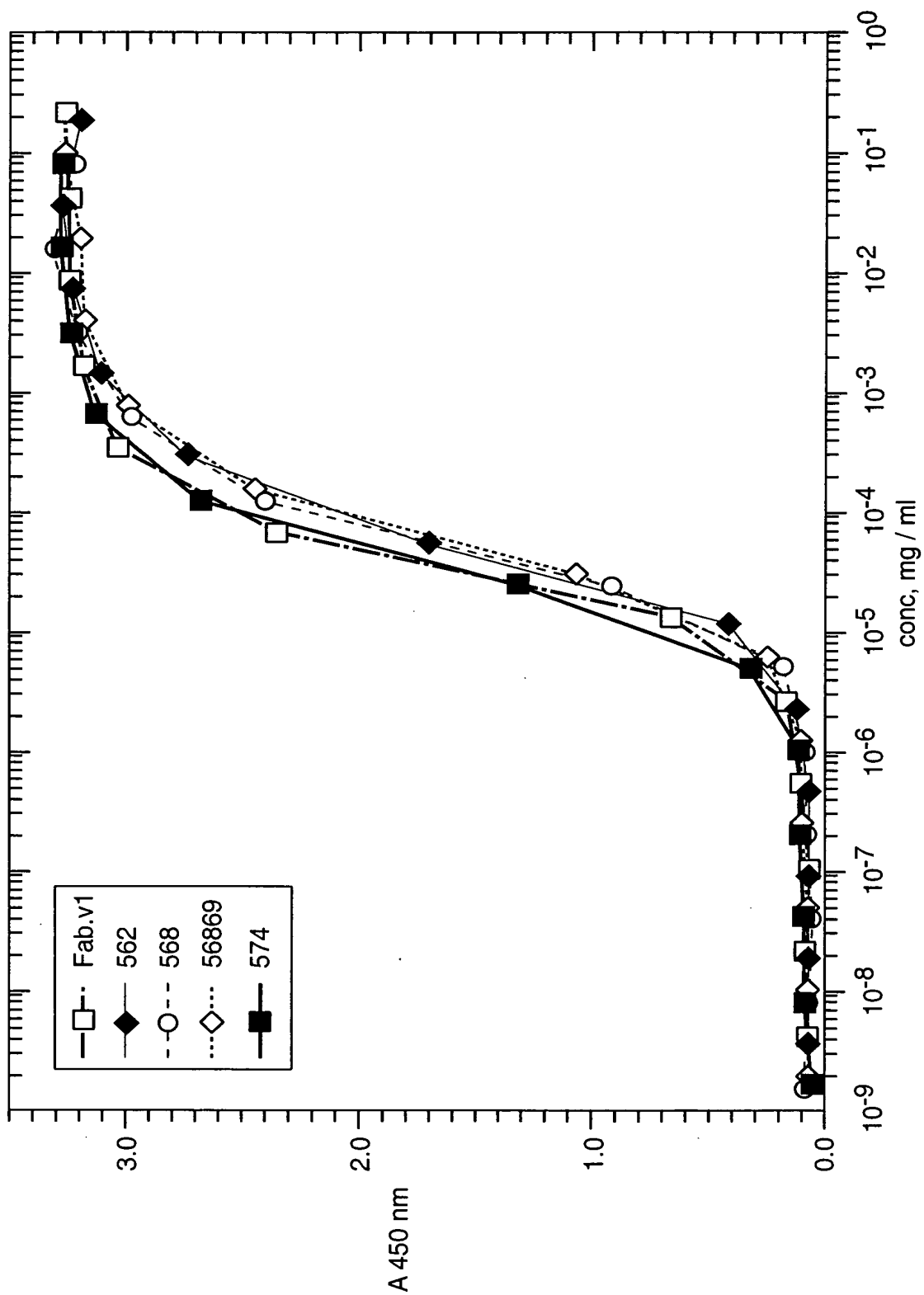


FIG._8C

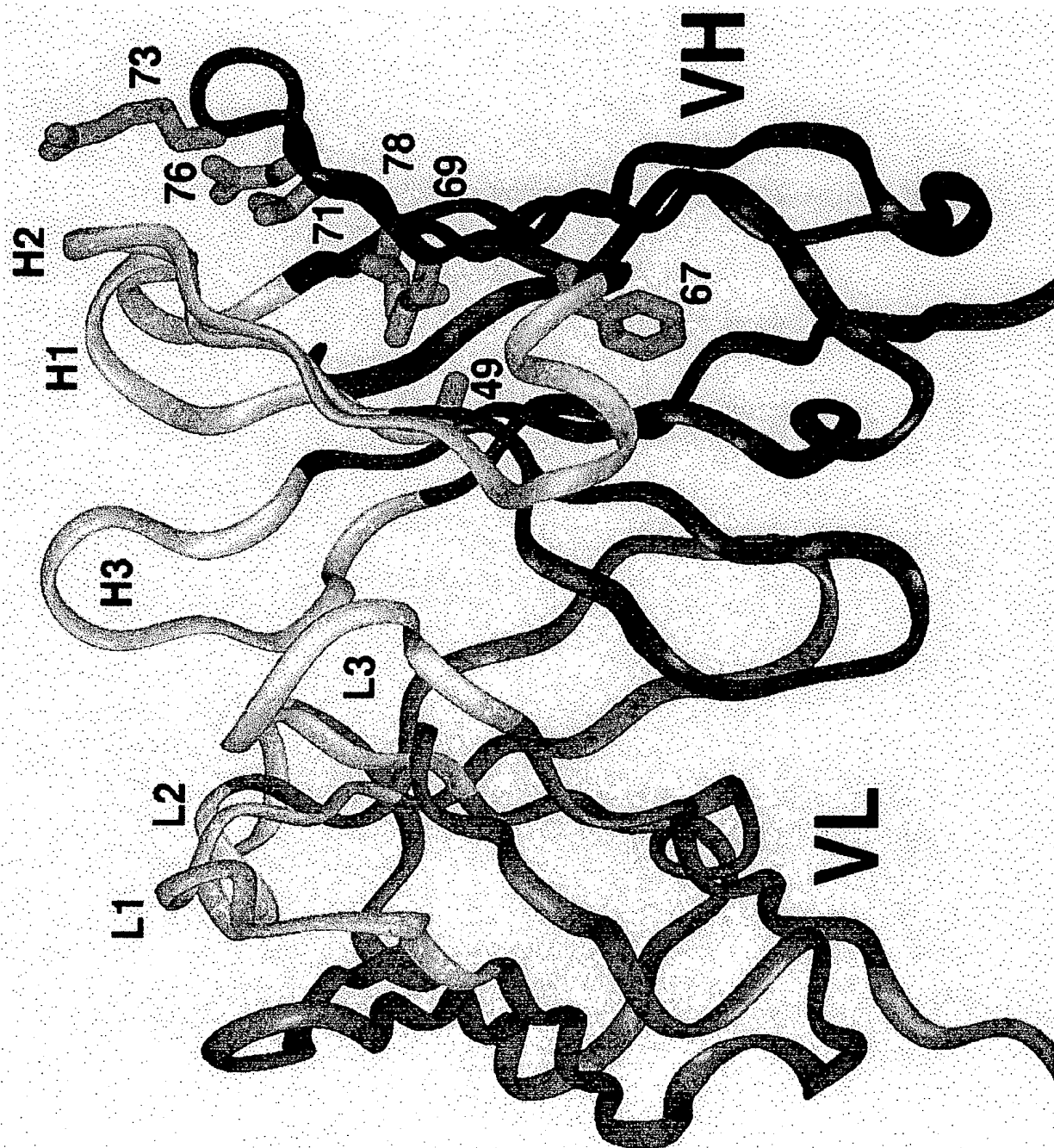
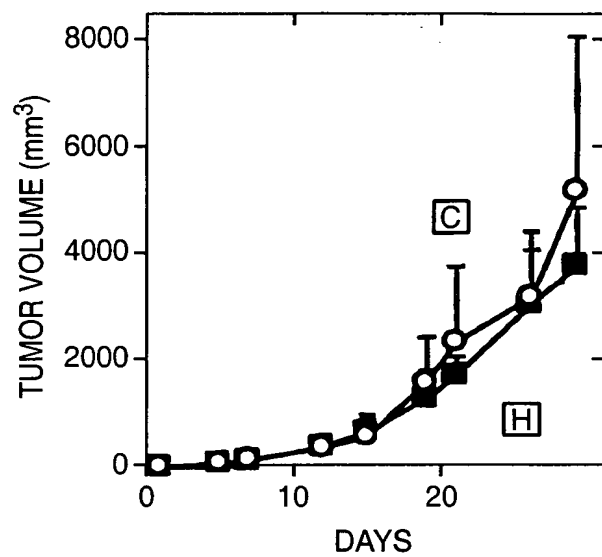
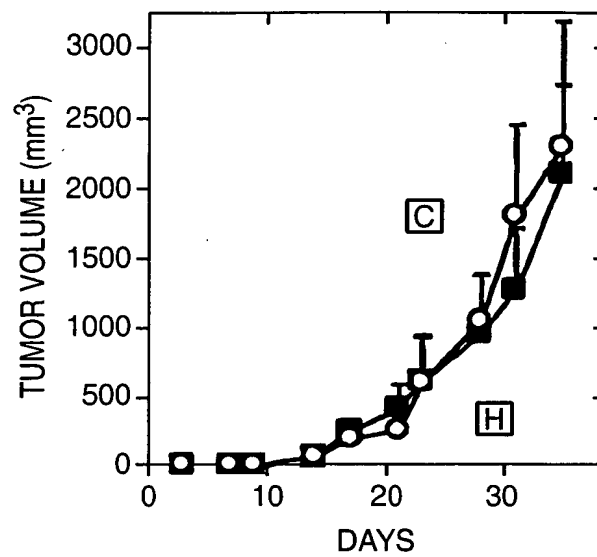
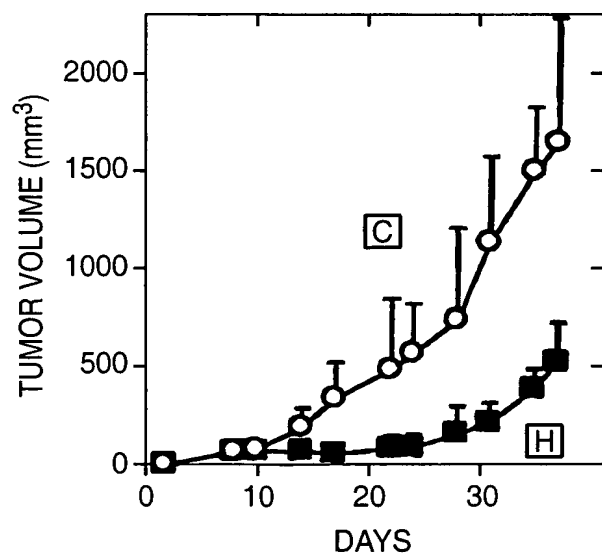
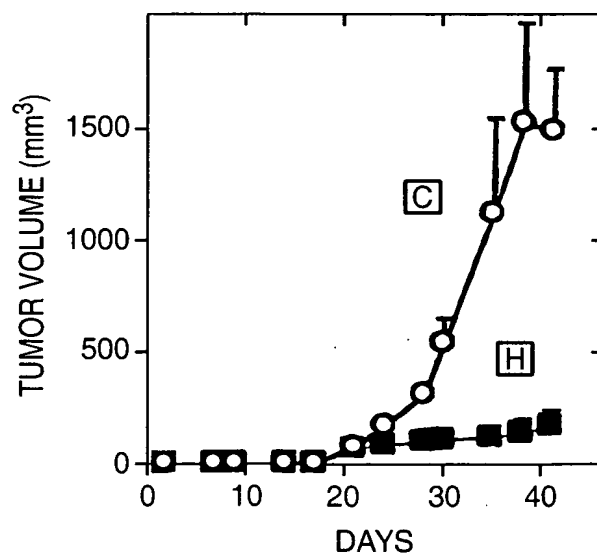
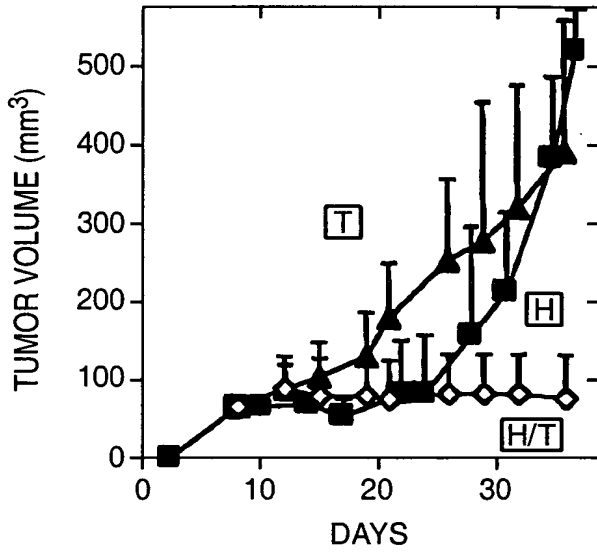
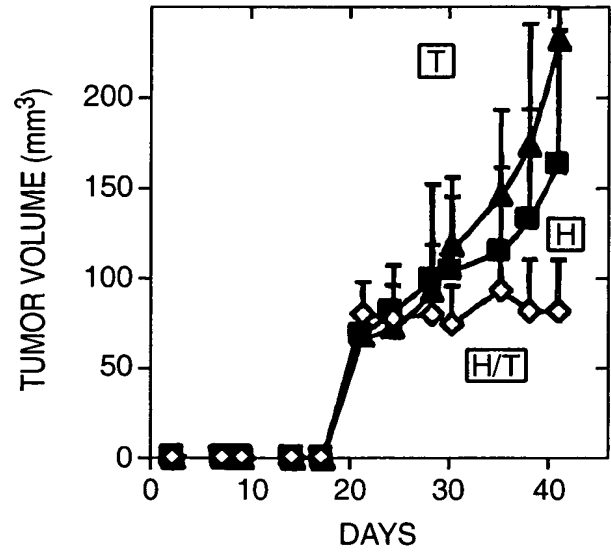
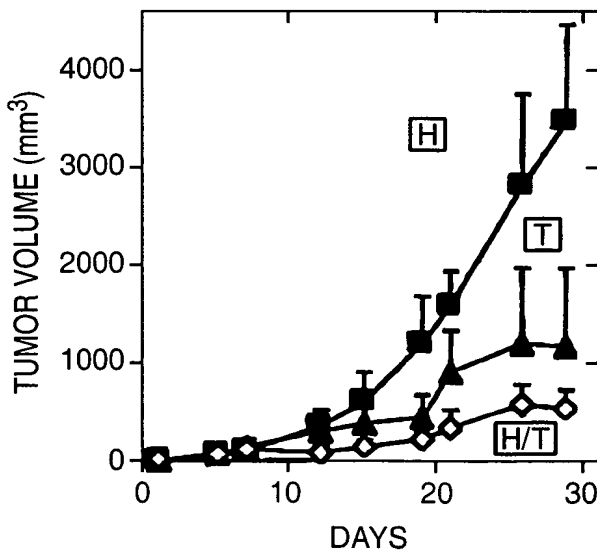
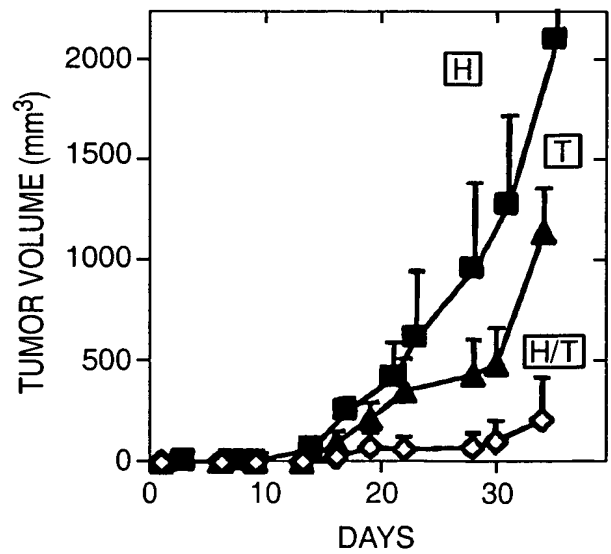
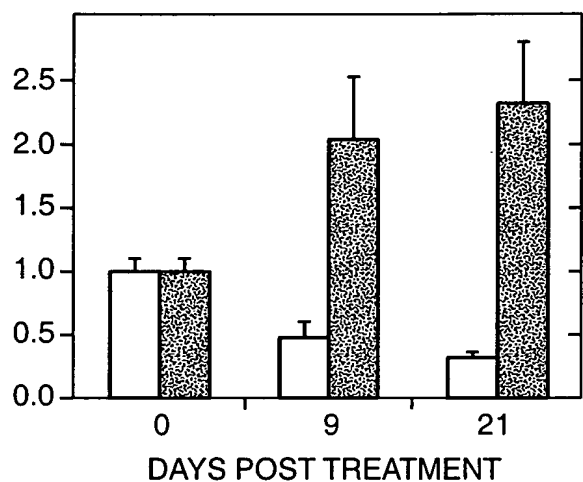
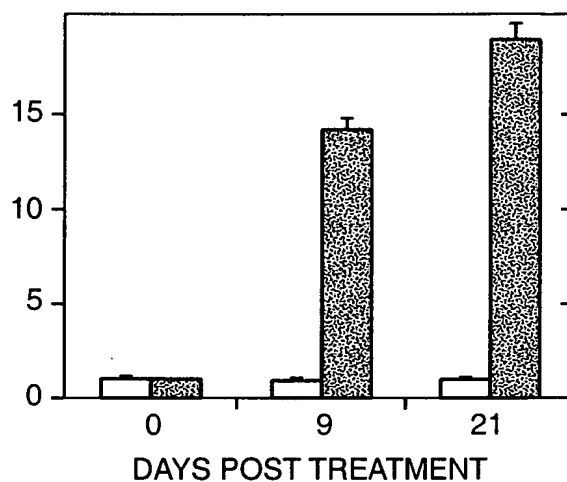
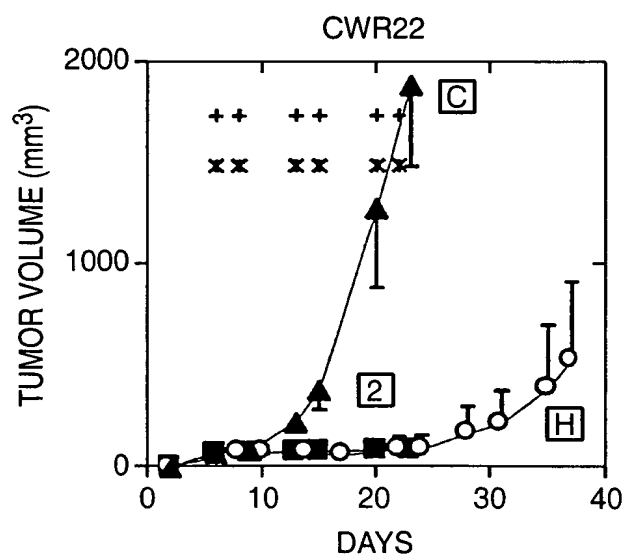
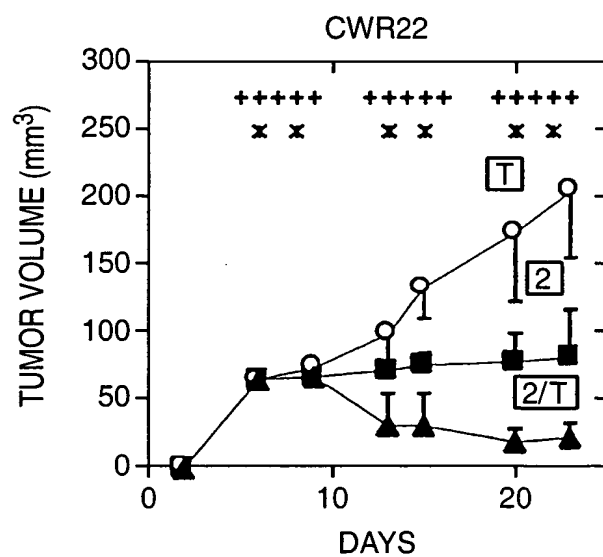
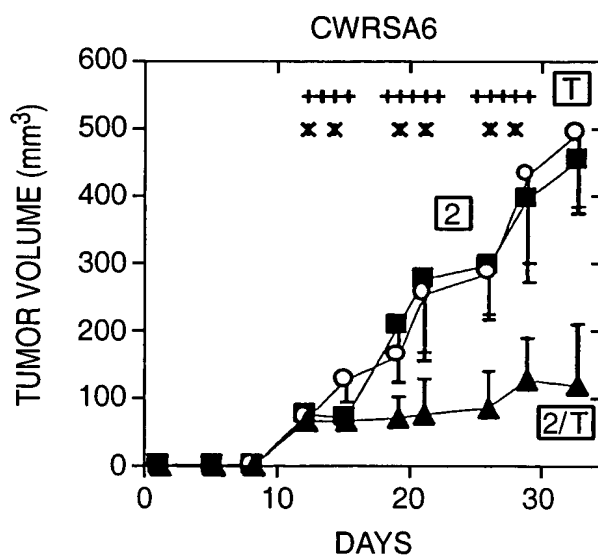
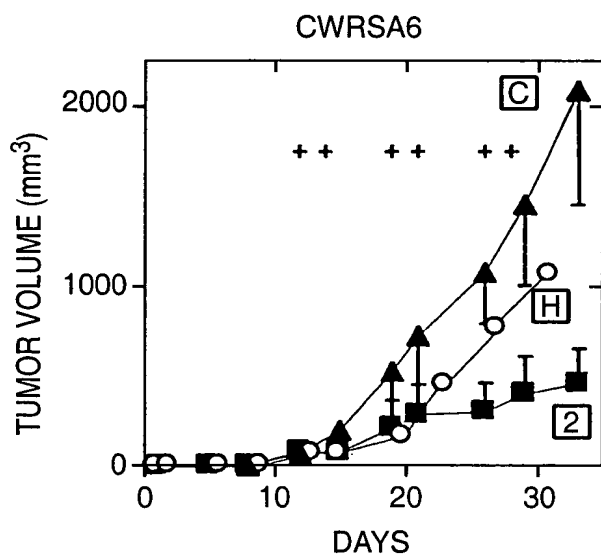
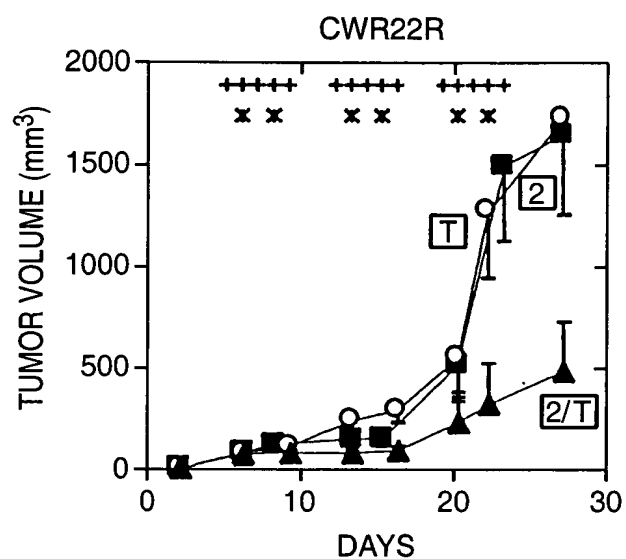
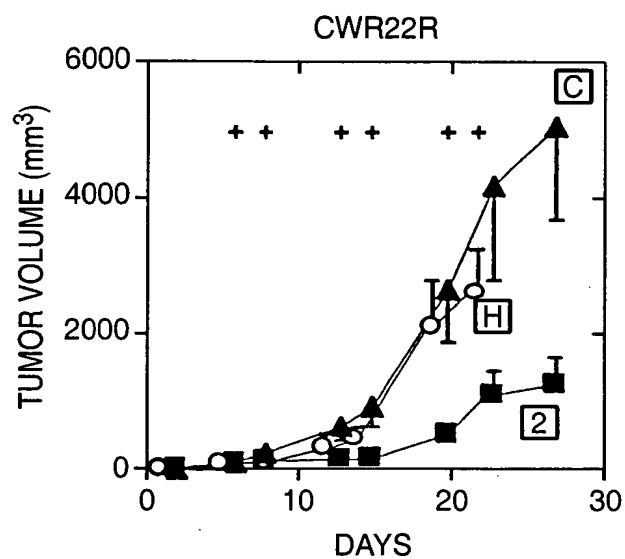


FIG.-9

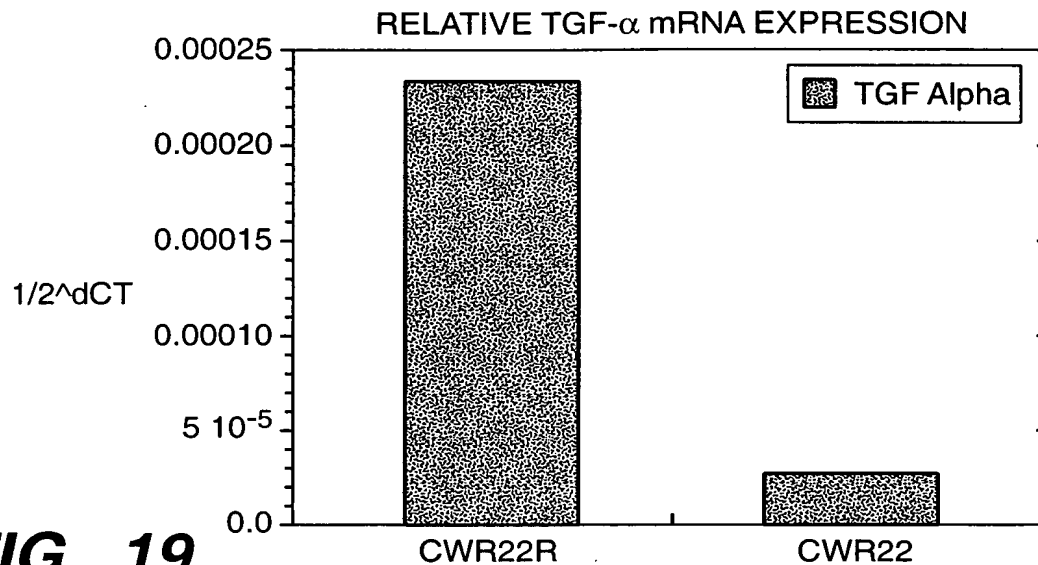
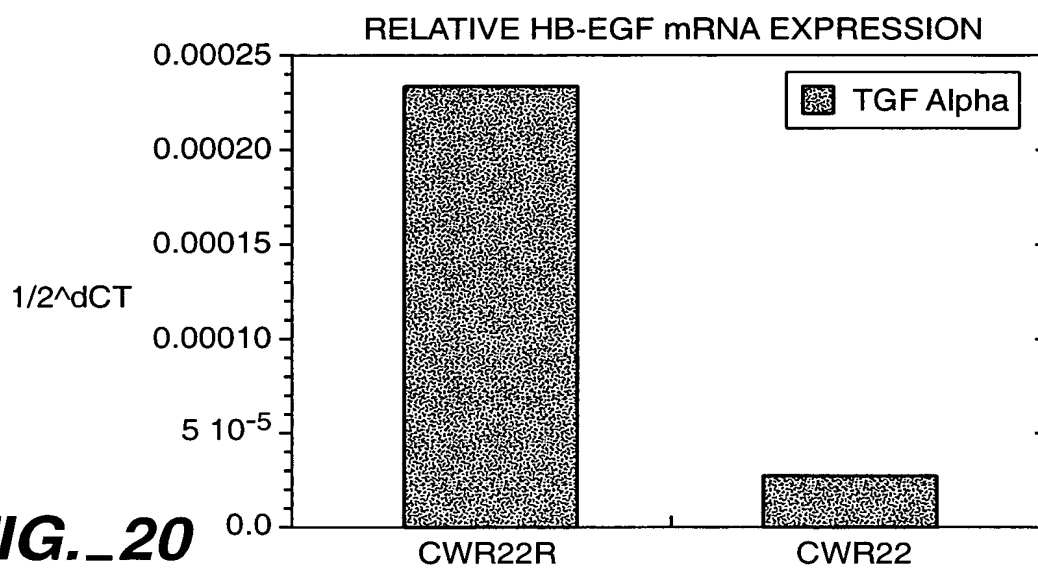
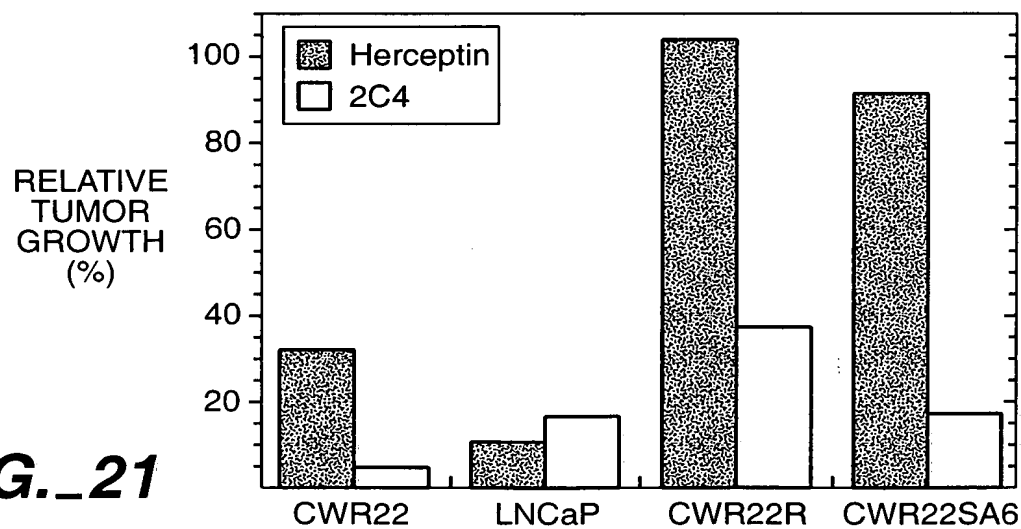
**FIG. 11A****FIG. 11B****FIG. 11C****FIG. 11D**

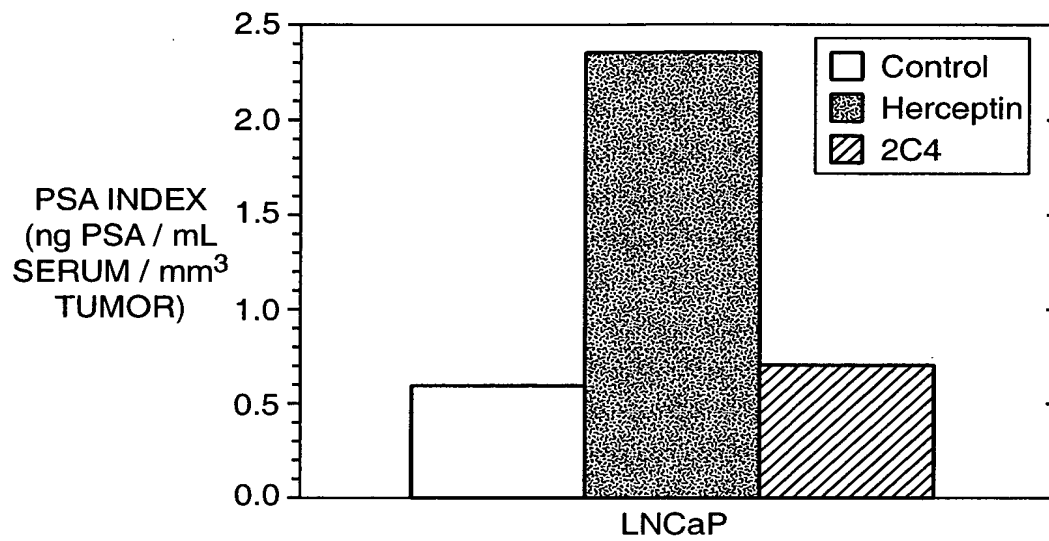
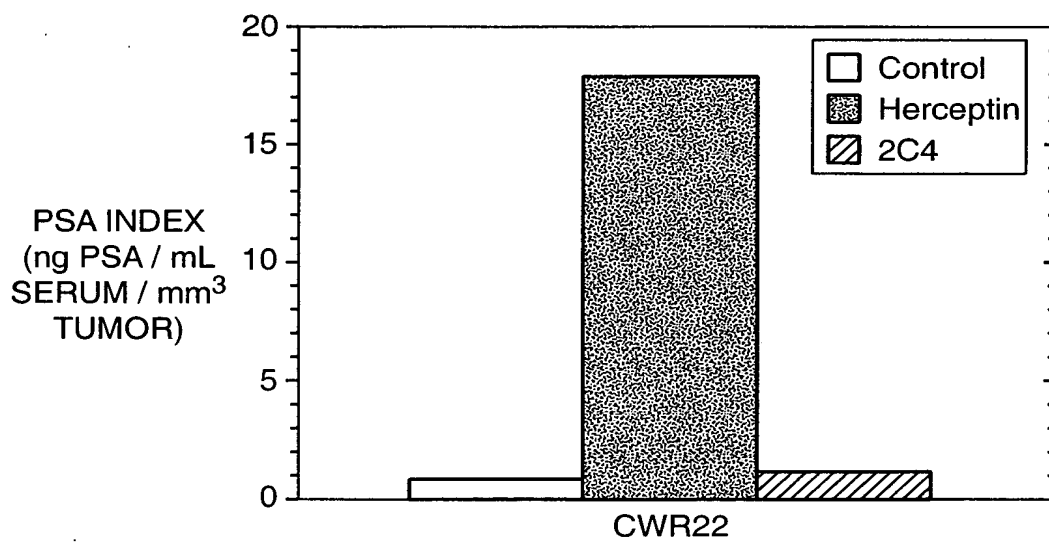
**FIG. 11E****FIG. 11F****FIG. 11G****FIG. 11H**

**FIG._12A****FIG._12B****FIG._13****FIG._14**



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**FIG._19****FIG._20****FIG._21**

**FIG. 22A****FIG. 22B**

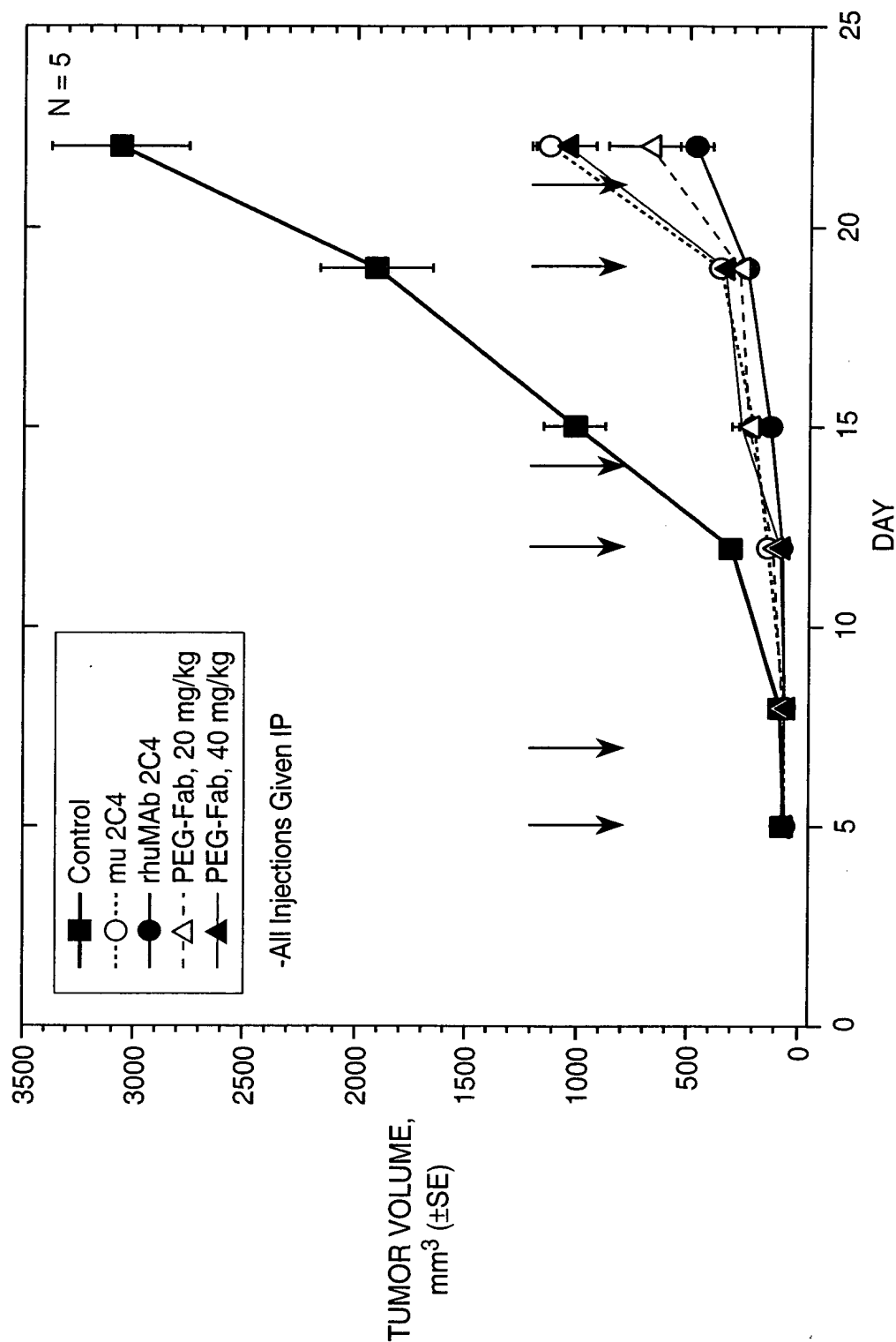


FIG. 23

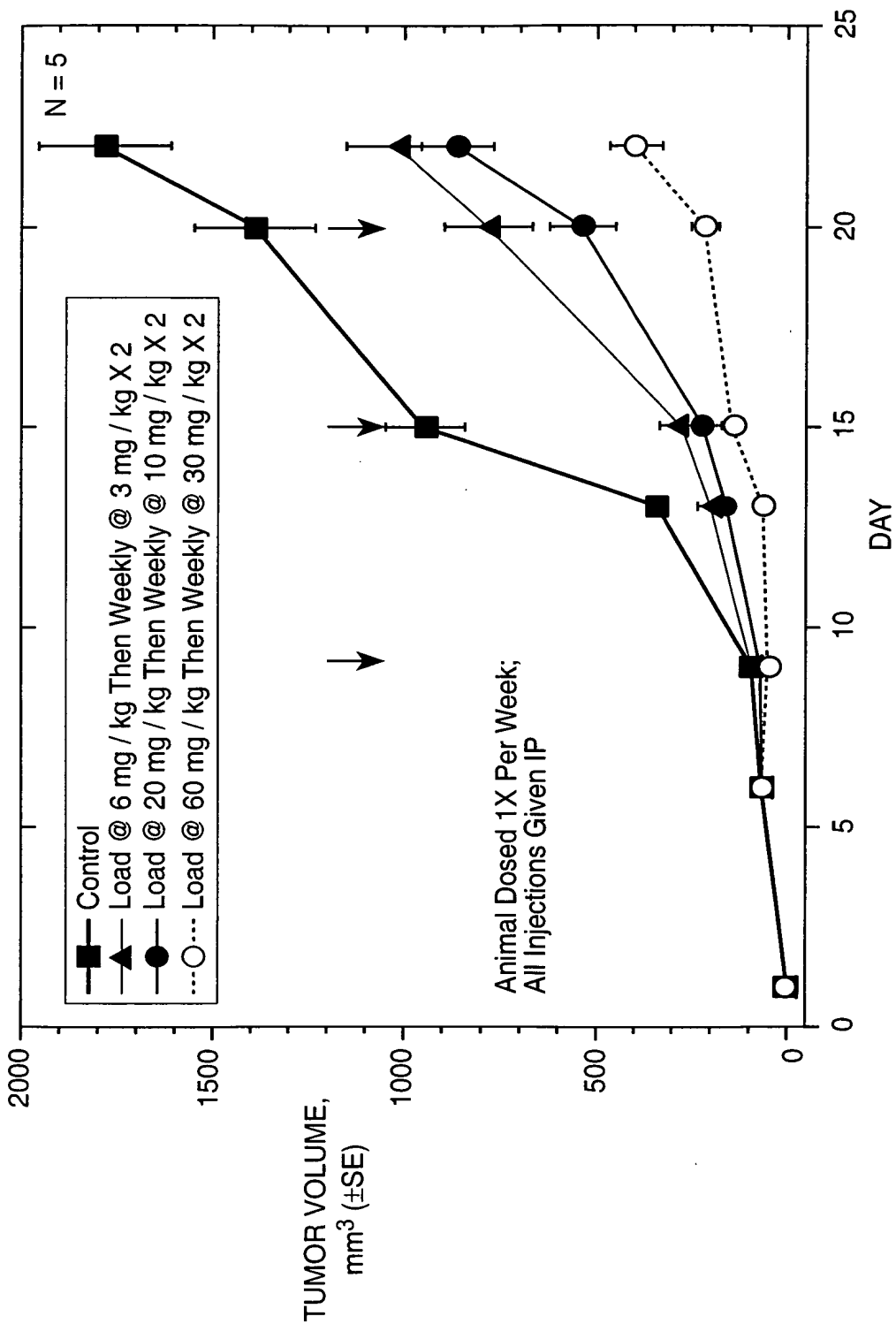


FIG. 24

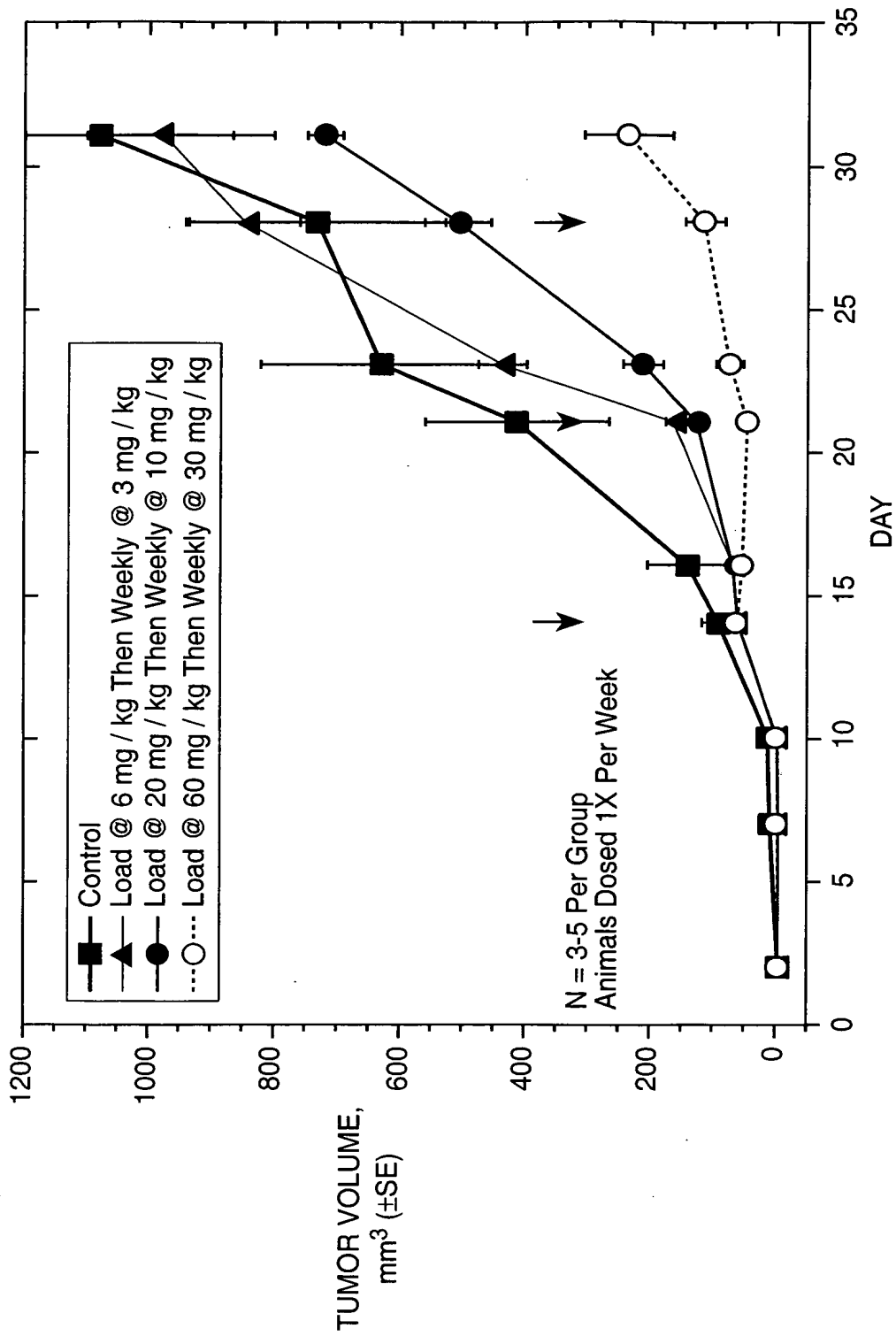


FIG. 25

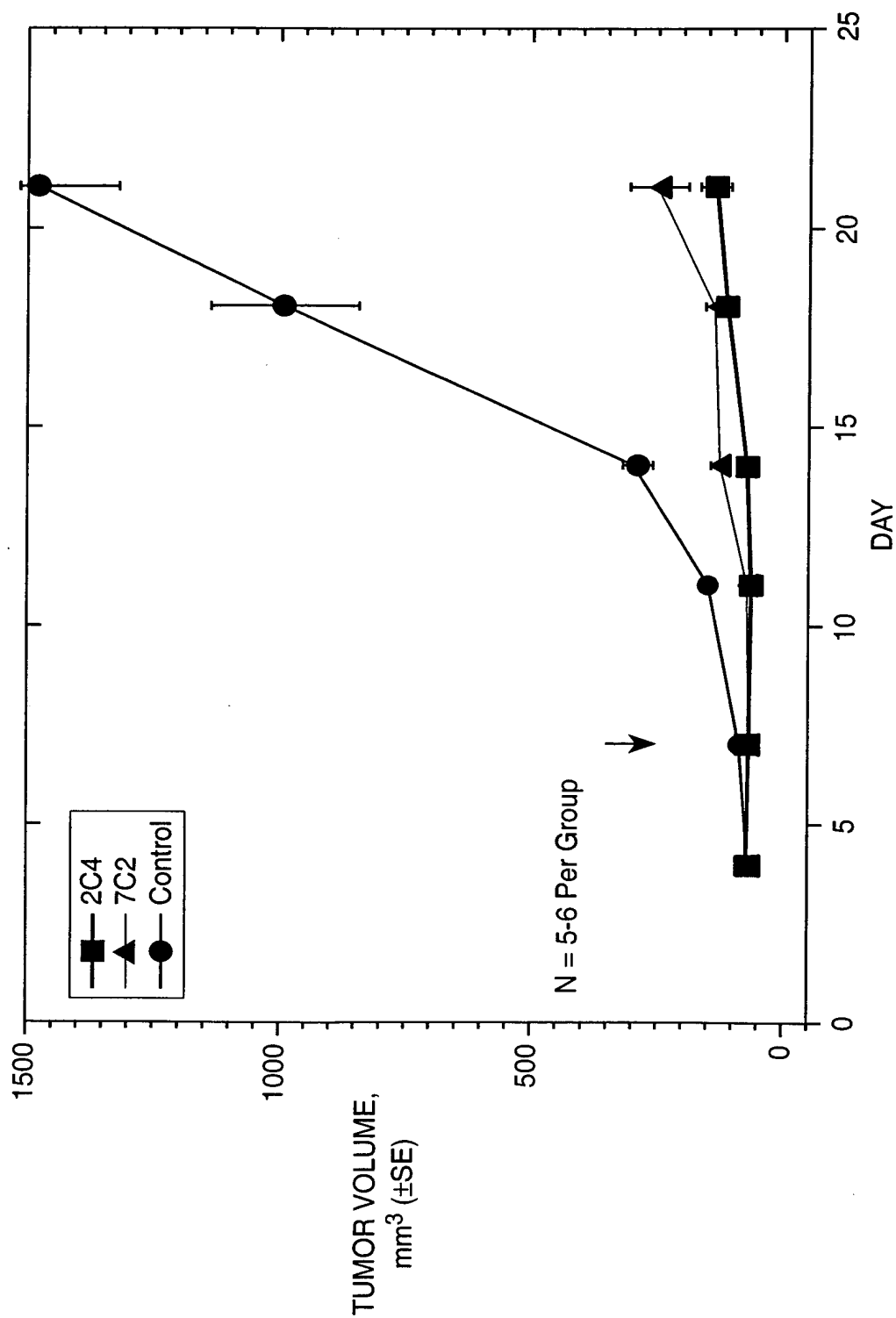


FIG. 26

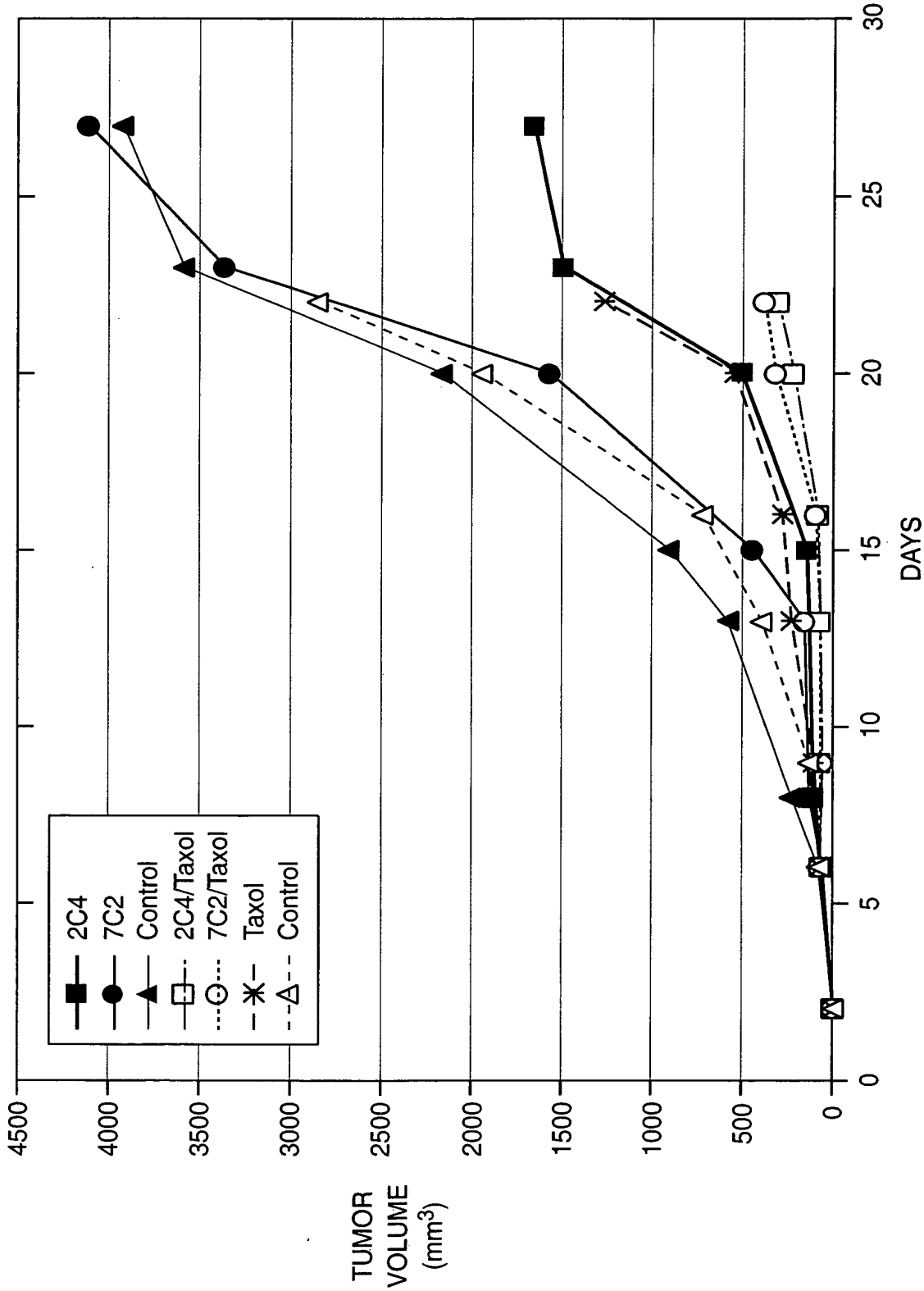


FIG. 27